REMARKS

This application has been carefully reviewed in view of the above-referenced Office Action, and reconsideration is requested in view of the following remarks.

Regarding the Rejections Under 35 USC § 112

Applicant appreciates the Examiner noting the inconsistency in claims 4, 5, 18 and 71 and has amended these claims to change "decryption" to encryption. This was obviously the intended meaning of the original claims. Applicant regrets any inconvenience this minor error caused the Examiner. Reconsideration of the 35 USC § 112 rejections in view of this amendment is respectfully requested.

Regarding the Rejections Under 35 USC § 103

Applicant has carefully reviewed the rejections and cited art, and respectfully requests reconsideration in view of the following arguments. These remarks are generally applicable to. all claims except where noted.

1. The Office Action Fails to Adequately Explain the Use of the Slattery Patent

The undersigned has carefully reviewed the Slattery reference and the Office Action. Despite the fact that the Office Action points to numerous locations in the Slattery reference to support the current rejections, the undersigned is unable to ascertain with certainty exactly which element of the Slattery reference allegedly correspond with the claim elements. By way of example, the Office Action cites Figure 2 and elements 115 and 170 as apparently meeting the claim limitations for the decryptor. Reference to Figure 2 reveals that two separate encryptor/decryptor devices 115 and 170 appear in the figure in different locations in order to serve two different encryption/decryption functions. It is unclear which is supposed to perform the same function in the same manner as claimed.

For example, in claim 1, Applicant's decrypter decrypts an encrypted and filtered MPEG transport stream containing only components having content related to a single program. The fact that the Slattery reference simply has one or more encryptor/decryptor devices does not in

Serial No.: 09/883,633

-15-

and of itself teach or suggest in any way that one or the other of these devices carries out the function described by the claim. Reference to the cited passages of text cited in the Office Action provided little guidance.

Accordingly, although Applicant is unable to completely figure out how the Examiner reads the cited reference on the claims, the arguments below are believed adequate to overcome any proposed combination, and thus, the undersigned will proceed with a response that is intended to be fully responsive to all issues necessary to resolve this matter in favor of patentability.

It is noted, that in order to read a reference on the claims, it must not only contain each and every element of the claims, but must have those elements interconnected and functioning in the manner claimed. While Slattery has certain features resembling some of the claim elements, these features are not connected in the same manner required by the claims and do not carry out the same functions as required by the claims.

2.   The Muratani Patent Does Not Operate as Asserted in the Office Action

MPEP 2143, first paragraph explains that one of the steps in establishment of *prima facie* obviousness is that *"the prior art reference (or references when combined) must teach or suggest all the claim limitations."* In the present application, the Office Action states *"Slattery does not explicitly disclose that a demultiplexer is the one that receives the filtered MPEG transport stream. ... However, in the field of endeavor Muratani, discloses that scrambled digital video data supplied from the network is filtered, descrambled and demultiplexed. (figure 15, ref. Number "113" and ref. Num "130")"*

However, a review of Muratani indicates that *"filter 113 is a circuit for extracting predetermined control data from multiplexed data transmitted via the network or necessary data from a multiprogram."* (col. 9, lines 16-18 – emphasis added) A review of Figure 15, cited in support of the Examiner's position, further reveals that this control data output by the filter 113 are supplied to security controller 150 along a separate path from that of the transport stream. Thus, the filtering does not produce an MPEG transport stream containing only components having content related to a single program (e.g., as required by claim 1). Instead, the output of

Serial No.: 09/883,633

-16-

interface 112 is apparently passed directly to descramble circuit 114, bypassing filter 113. Moreover, the filter 113 is used for the purpose of extracting control data rather than meeting the claim limitations. Thus, the signal fails to meet the limitation of being encrypted and filtered in the manner claimed. This being the case, the combination of Slattery and Muratani fail to adequately teach or fairly suggest each and every claim feature.

All claims of the present application require, in some manner, that there be a filtered and encrypted MPEG signal; or contains limitations that the MPEG signal contains information related only to a single program except claims 68, 70-72, and 79. Accordingly, reconsideration of claims 1-67, 69 and 73-78 is respectfully requested in view of the above.

3.   The Slattery Patent Does Not Appear to Disclose all of the Claim Elements as Arranged in the Claims in the Manner Suggested by the Office Action

As previously noted, MPEP 2143, first paragraph explains that one of the steps in establishment of *prima facie* obviousness is that "*the prior art reference (or references when combined) must teach or suggest all the claim limitations.*" This inherently requires that the arrangement of the elements of the claims must be shown or suggested by the cited art. The Office Action fails to produce this showing. Consider claim 1, again as an example and not intending to confer claim 1's limitations on other claims by this discussion.

Claim 1 first requires an external storage device for a STB or PVR. The Office Action points to Col. 13, lines 13-14; column 12, lines 65 to column 13 line 7 of Slattery to support this claim element. The cited text refers to elements 50 and 60 of Slattery. The Slattery reference is totally unrelated to an external storage device, but to a remultiplexer device for which elements 50 and 60 are simply sources of and destinations for the transport streams of remultiplexer 30.

Claim 1 next requires means for receiving an encrypted and filtered MPEG transport stream containing only components having content related to a single program. The Office action admits that such a signal is not taught by Slattery. The specific references cited to support Slattery's teachings simply mention a transport stream and filtering of such in order to "selectively extract ... desired packets". The shortcomings of the Muratani reference in

Serial No.: 09/883,633

-17-

supplying the missing teaching was discussed above. There is thus no teaching in either reference or the combination of references of all of this claim element.

Claim 1 next requires a decryptor that decrypts the filtered MPEG transport stream. As noted in the previous section, it is unclear which decryptor is used and how it meets this claim limitation.

Claim 1 next requires a demultiplexer that extracts the MPEG table from the MPEG transport stream. This function appears to be shown in Slattery.

Claim 1 next requires that a formatter reinsert the MPEG table back into the filtered MPEG transport stream, with the reinserted table containing <u>only</u> information related to a single program. The passages cited by the Examiner in support of a teaching of this feature falls short of such a teaching. While there is suggestion of modification of certain MPEG tables, the reference does not explicitly teach or fairly suggest that the formatter reinserts a table containing <u>only</u> information related to a single program. In fact, the nature of "remultiplexing" could easily be construed to suggest the opposite.

Finally, claim 1 requires the modified MPEG transport stream be stored on a disc drive. The Slattery disc drive is disclosed as storing only transport streams to be remultiplexed, or that have already been remultiplexed.

Thus, the teachings of Slattery fall short of disclosing all elements and their arrangement in a manner that is adequate to place one of ordinary skill in the art in possession of the invention. The Examiner cites Muratani to make up the deficiencies, however, the flaws discussed above are not addressed in either reference or the combination of the references. Accordingly, reconsideration of all claims is respectfully requested.

4.   <u>The Office Action Fails to Explain a Motivation to Make the Proposed Combination</u>

In order to establish *prima facie* obviousness, it is the burden of the Examiner to provide a convincing line of reasoning as to how one of ordinary skill in the art would be motivated to make the proposed combination. No such explanation is proposed in the Office Action. The only statement that could be construed as an explanation of the motivation for such a combination is that the combination would be obvious *"in order to accommodate the multimedia*

Serial No.: 09/883,633

-18-

data which are communicated by multiplexing video data and audio according the system specification of the MPEG-2." If this is to be interpreted as the motivation for making the proposed combination, it would be natural to assume that the present invention is somehow necessary to "accommodate" multimedia video and audio data in MPEG-2. Clearly this is not the case. Thus, the proposed motivation is non-existent.

The present invention relates to a mechanism that permits efficient storage of data in an storage device external to a STB or PVR device (by filtering and formatting to assure that the content only contains information related to the program being stored), which is able to function in a manner that protects the programming content from being available in the clear so that it could be easily stolen or misused by one who does not have appropriate rights to the content.

In fact, it would appear that both Muratani and Slattery are oblivious to any problem associated with producing readily available clear content. In Muratani's Figure 15, the output of IC card 110's descramble circuit is clear content that is available at interface 111 for easy theft. Similarly, descrambler 115 of Slattery produces decrypted transport stream packets which are delivered to the DMA handler 116 for storage in memory 120 (col. 27, lines 4-12) in unencrypted form via PCI bus 130. Clearly, this also presents the possibility for clear data to also be obtained illicitly from bus PCI 130. Both references appear willing to provide unencrypted data at a point of easy interception.

These teachings of the cited art clearly teach away from any need to protect the integrity of encrypted data as it passes from component to component, in clear contrast with Applicant's teachings which provides only encrypted data at the interface of the external storage device. There can accordingly be no suggestion to make the proposed combination. Moreover, if the combination is made, there is clearly no recognition of the problem addressed by Applicant that would lead one of ordinary skill in the art to all of the claim features of Applicant's claims. Accordingly, reconsideration and allowance of all claims is respectfully requested.

5.   The Combination With the "5C" Reference Still Fails to Produce the Filtered Transport Stream and Formatting as Taught and Claimed

Serial No.: 09/883,633

-19-

The combination of all three references is not suggested by the art for the same reasons explained above. However, assuming *arguendo* that some reasonable suggestion existed to make the combination of Slattery and Muratani and "5C Digital Transmission", the combination still falls short of disclosing the filtering and reformatting as taught and claimed to assure that the transport stream and tables only contain information related to a single program. Accordingly, reconsideration and allowance of all claims is respectfully requested.

Summary / Conclusion

The undersigned additionally notes that many other distinctions exist between the cited references and the invention as claimed. However, in view of the clear distinctions pointed out above, further discussion of these deficiencies is believed to be unnecessary at this time. Failure to address each point raised in the Office Action should accordingly not be viewed as accession to the Examiner's position.

No amendment made was for the purpose of narrowing the scope of any claim. The only amendments made were to correct minor errors which were readily understood to be errors by the Examiner and are believed to have been properly interpreted despite any errors. In view of this communication, all claims are now believed to be in condition for allowance and such is respectfully requested at an early date. If further matters remain to be resolved, the undersigned respectfully requests the courtesy of an interview. The undersigned can be reached at the telephone number below.

Respectfully submitted,

Jerry A. Miller
Registration No. 30,779

Dated: 3/1/2005

March 1, 2005

Please Send Correspondence to: **Customer Number 24337**
Jerry A. Miller
Miller Patent Services
2500 Dockery Lane
Raleigh, NC 27606
Phone: (919) 816-9981
Fax: (919) 816-9982

Serial No.: 09/883,633

-20-